WHAT IS CLAIMED IS:

1. An interconnect structure comprising:

a substrate;

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an interconnect layer which is formed on said substrate and includes an interconnect body and a conductive film formed on said interconnect body;

an interlayer insulating film formed so as to cover said interconnect layer;

a conductor which is formed in a contact hole extending through said interlayer insulating film and includes a first region in contact with a top surface portion of said interconnect layer and a second region in contact with a side surface portion of said interconnect layer; and

a high resistance layer formed in a side surface portion of said interconnect body which is in contact with said second region of said conductor.

2. The interconnect structure according to claim 1,

wherein said high resistance layer is formed of said side surface portion of said interconnect body which is nitrided.

3. The interconnect structure according to claim 1,

wherein said high resistance layer is formed of said side surface portion of said interconnect body which is oxidized.

4. An interconnect structure comprising:

a substrate;

an interconnect layer which is formed on said substrate and includes an

interconnect body and a conductive film formed on said interconnect body;

an interlayer insulating film formed so as to cover said interconnect layer; and a conductor which is formed in a contact hole extending through said interlayer insulating film and includes a first region in contact with a top surface portion of said interconnect layer and a second region connected to a side surface portion of said interconnect layer,

wherein an end face of said interconnect body is withdrawn relative to an end face of said conductive film,

a portion of said interlayer insulating film is provided in a space formed because of withdrawal of said end face of said interconnect body relative to said end face of said conductive film, and

said interconnect body and said second region of said conductor are connected to each other with said portion of said interlayer insulating film interposed therebetween.

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